REMARKS

This response is intended as a full and complete response to the non-final Office Action mailed September 10, 2004. In the Office Action, the Examiner notes that claims 1-34 are pending, of which claims 1-34 are rejected and claim 12 is objected to. By this response, the Applicant has amended claims 1, 4, 12 and 17, canceled claim 34, and claims 2-3, 5-11, 13-16, and 18-33 continue unamended.

In view of both the amendments presented above and the following discussion, the Applicant submits that none of the claims now pending in the application are non-enabling, anticipated or obvious under the respective provisions of 35 U.S.C. §112, §102 or §103. Thus, the Applicant believes that all of these claims are now in allowable form.

It is to be understood that the Applicant, by amending the claims, does not acquiesce to the Examiner's characterizations of the art of record or to the Applicant's subject matter recited in the pending claims. Further, the Applicant is not acquiescing to the Examiner's statements as to the applicability of the art of record to the pending claims by filing the instant responsive amendments.

IN THE SPECIFICATION

The Applicant has amended the specification to correct minor grammatical inconsistencies, and update reference information for applications that are incorporated by reference in the specification. Such amendments do not add any new subject matter to the application.

CLAIM OBJECTIONS

The Examiner has objected to claim 12 stating that in claim 12, page 22, line 1, "at least on packet" should --be at least one packet--. The Applicant has amended the claim as suggested by the Examiner, and therefore the Applicant respectfully requests that the Examiner's objection be withdrawn.

REJECTIONS

35 U.S.C. §112

Claim 4

The Examiner has rejected claim 4 as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. In particular, the Examiner contends that there is insufficient antecedent basis for the limitation "said local streaming server" in line 20 of claim 4. The Applicant respectfully traverses the Examiner's rejection.

The Applicant has amended dependent claim 4 to properly depend from dependent claim 2. Accordingly, the feature "said local streaming server" has proper antecedent basis based on its dependency from dependent claim 2. Therefore, the Applicant respectfully requests that the rejection be withdrawn.

35 U.S.C. §102

Claims 1, 2, 4, 5, 8, 11-19, 24 and 27-34

The Examiner has rejected claims 1, 2, 4, 5, 8, 11-19, 24 and 27-34 under 35 U.S.C. §102(e) as being anticipated by Mimura et al. (US006557031B1, hereinafter "Mimura"). The Applicant respectfully traverses the rejection.

A. Claim 34

The Applicant has canceled claim 34. Therefore, the rejection is now considered moot.

B. Claims 1, 2, 4, 5, 8, 11-19, 24 and 27-33

Independent claims 1 and 17 recite features of the Applicant's invention that the Applicant considers to be inventive. In particular, independent claims 1 and 17 recite:

> 1. "A method of streaming content to at least one access network of a plurality of heterogeneous access networks, comprising:
> encapsulating said content in an Internet Protocol (IP) packet;
> processing said content into a format native to an access network from which a user request originated; and

streaming said IP packet containing said content to said at least one access network via a distribution network coupled to said plurality of heterogeneous access networks." (emphasis added).

17. "An apparatus providing scalable streaming of content to at least one access network of a plurality of heterogeneous access networks associated with an interactive information distribution system, said apparatus comprising:

at least one stream caching server for streaming said content as an Internet Protocol (IP) packet to said at least one access network via a stream distribution network in response to a request for content, said content being encapsulated within said IP packet; and

a packet processor coupled to said at least one stream server for processing said encapsulated content within said IP packets into at least one packet in a format native to said at least one access network of said plurality of heterogeneous access networks." (emphasis added).

"Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim" (Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing Connell v. Sears, Roebuck & Co., 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)) (emphasis added). The Mimura reference fails to disclose each and every element of the claimed invention, as arranged in the claim.

The Mimura reference discloses "a method/equipment in which the conversion between an IP address and the PID (Packet Identifier) value of a TS (Transport Stream) packet is performed when a video signal transmitted using the Internet Protocol (IP) is to be transmitted by use of the H.222.0 system and a video transmission system which uses such a method/equipment." (See Mimura, column 1, lines 1-21).

Nowhere in the Mimura reference is there any teaching or suggestion of "streaming said IP packet containing said content to said access network via a distribution network coupled to said plurality of heterogeneous access networks." That is, the Applicant's invention is capable of streaming content from the stream caching server, where the content is formatted as internet protocol (IP) packets. The content is configured as a plurality of packets (e.g., MPEG packets) contained in a payload of realtime transport protocol (RTP) packet within an IP packet. The use of this IP formatted content enables a single stream cache server located at the head end to stream content over the streamed distribution network to non-homogeneous types of

access networks (i.e., heterogeneous access networks) in a format native to such access network. As such, the system is capable of streaming the content to, for example, a person utilizing cable service, a computer on the internet, a DSL, satellite and the like (see Applicant's specification, page 4, lines 19-30). Since the Mimura reference fails to teach or even suggest "streaming said IP packet containing said content to said access network via a distribution network coupled to said plurality of heterogeneous access networks," the cited reference fails to teach each and every element of the claimed invention as arranged in the claim.

As such, the Applicant submits that independent claims 1 and 17 are not anticipated and fully satisfy the requirements of 35 U.S.C. §102 and are patentable thereunder. Furthermore, claims 2, 4, 5, 8, 11-16, 18, 19, 24 and 27-33 depend, either directly or indirectly, from independent claims 1 and 17 and recite additional features thereof. As such and at least for the same reasons as discussed above, the Applicant submits that these dependent claims are also not anticipated and fully satisfy the requirements of 35 U.S.C. §102 and are patentable thereunder. Therefore, the Applicant respectfully requests that the rejections be withdrawn.

35 U.S.C. §103

Claims 9, 10, 20, 25 and 26

The Examiner has rejected claims 9, 10, 20, 25 and 26 under 35 U.S.C. §103(a) as being unpatentable over the Mimura reference. The Applicant respectfully traverses the rejection.

The test under 35 U.S.C. §103 is not whether an improvement or a use set forth in a patent would have been obvious or non-obvious; rather the test is whether the claimed invention, considered as a whole, would have been obvious. Jones v. Hardy, 110 USPQ 1021, 1024 (Fed. Cir. 1984) (emphasis added). Moreover, the invention as a whole is not restricted to the specific subject matter claimed, but also embraces its properties and the problem it solves. In re Wright, 6 USPQ 2d 1959, 1961 (Fed. Cir. 1988) (emphasis added). The Mimura reference fails to teach or suggest the Applicant's invention as a whole.

Claims 9, 10, 20, 25 and 26 respectively depend from independent claims 1 and 17 and recite additional features thereof. As discussed above, nowhere in the Mimura reference is there any teaching, or even suggestion of "streaming said IP packet containing said content to said access network via a distribution network coupled to said plurality of heterogeneous access networks." Rather, the Mimura reference merely discloses streaming IP packets containing content in a homogeneous network such as a CATV network, a DAVIC network, or other type of network. Therefore, the Mimura reference fails to teach or suggest the Applicant's invention as a whole.

As such, the Applicant submits that dependent claims 9, 10, 20, 25 and 26 are not obvious and fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Therefore, the Applicant respectfully requests that the rejection be withdrawn.

Claims 3 and 23

The Examiner has rejected claims 3 and 23 under 35 U.S.C. §103(a) as being unpatentable over Mimura in view of Zheng et al. (US006611522B1, hereinafter "Zheng"). The Applicant respectfully traverses the rejection.

As discussed above, the Mimura reference does not teach or suggest the Applicant's invention as disclosed and claimed in independent claims 1 and 17 as a whole. Claims 3 and 23 depend directly or indirectly from the Applicant's independent claims 1 and 17. Therefore, for at least the same reasons as discussed above with respect to the Applicant's independent claims 1 and 17, the Mimura reference fails to teach or suggest the Applicant's invention as a whole.

Furthermore, the Zheng reference fails to bridge the substantial gap between the Mimura reference and Applicant's invention. In particular, the Zheng reference discloses"

> "The transmit ASIC 71 on the line card 53 packages the data (i.e. encapsulates) in a format that is appropriate for the destination. The QoS output portion 71a schedules and shapes the output of the packaged data, based on classification information provided by the QoS input portion 70a. The QoS output portion 71a may also drop or mark the packaged data, based on the congestion status at the output ports. (See Zheng, column 11, line 34 to column 12, line 14).

Even if the two references could somehow be operably combined, the combination would merely disclose sending IP packets formatted for a particular quality of service to subscribers over a homogeneous network. Nowhere in the combined references is there any teaching or suggestion of "streaming said IP packet containing said content to said access network via a distribution network coupled to said plurality of heterogeneous access networks." Therefore, the combined references fail to teach or suggest the Applicant's invention as a whole.

For at least the reasons discussed above, the Applicant submits that claims 3 and 23 are patentable under 35 U.S.C. §103 over Mimura in view of Zheng. Therefore, the Applicant respectfully requests that the Examiner's rejection be withdrawn.

Claims 6, 7, 21 and 22

The Examiner has rejected claims 6, 7, 21 and 22 under 35 U.S.C. §103(a) as being unpatentable over Mimura in view of Wahl (US005898456A, hereinafter "Wahl"). The Applicant respectfully traverses the rejection.

As discussed above, the Mimura reference does not teach or suggest the Applicant's invention as disclosed and claimed in independent claims 1, 17 and 34 as a whole. Claims 6, 7, 21 and 22 depend directly or indirectly from the Applicant's independent claims 1 and 17. Therefore, for at least the same reasons as discussed above with respect to the Applicant's independent claims 1 and 17, the Mimura reference fails to teach or suggest the Applicant's invention as a whole.

Furthermore, the Wahl reference fails to bridge the substantial gap between the Mimura reference and the Applicant's invention. In particular, the Wahl reference discloses:

> "The local servers are the subordinate servers and the central servers are the superordinate servers. If a user requests a movie, it is transmitted by the server close to the user (local server). If the local server cannot comply with the user's request, the local server requests a copy of the requested movie from the central server, which is stored in the local server via downloading. The local server has a reserve memory for storing the movie transmitted by the central server." (See Wahl, column 1, lines 32-40).

Even if the two references could somehow be operably combined, the combination would merely disclose streaming content from a central server to a local server, and streaming the content from the local server to a requesting subscriber via a homogeneous network. Nowhere in the combined references is there any teaching or suggestion of "streaming said IP packet containing said content to said access network via a distribution network coupled to said plurality of heterogeneous access networks." Therefore, the combination of Mimura and Wahl fails to teach or suggest the Applicant's invention as a whole.

For at least the reasons discussed above, the Applicant submits that claims 6, 7, 21 and 22 are patentable under 35 U.S.C. §103 over Mimura in view of Wahl. Therefore, the Applicant respectfully requests that the Examiner's rejection be withdrawn.

THE SECONDARY REFERENCES

The secondary references made of record are noted. However, it is believed that the secondary references are no more pertinent to the Applicant's disclosure than the primary references cited in the Office Action. Therefore, the Applicant believes that a detailed discussion of the secondary references is not necessary for a full and complete response to this Office Action.

CONCLUSION

Thus, the Applicant submits that all of the claims presently in the application, are enabling, not anticipated, non-obvious and patentable under the respective provisions of 35 U.S.C. §112, §102 and §103. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Eamon J. Wall, Esq. or Steven M. Hertzberg at

(732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

Dated: 12/8/04

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